EXECUTIVE ORDER U-R-013-0586 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)			
2019	KDZXL06.1059	6.057	Diesel	8000			
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Continuous Trap Oxidizer, Selective Catalytic Reduction-Urea			Off-Road Crane, Loader, Pump, Compressor, Other Industria Equipment				

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED	EMISSION		EXHAUST (g/kW-hr)					OPACITY (%)		
POWER	STANDARD		NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.02	0.18		1.5	0.01			-

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this

day of September 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Deutz AG Nonroad CI

Attachment page 1 of 1

Engine Model Summary Template

E0#U-R-013-0586 Date: 9/13/2018

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate; (lbs/hr) @ peak HP (for diesels only)		7.Fuel Rate: mm/stroke@pe ak torque	8.Fuel Rate; (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
KDZXL06.1059	CFVI129	TCD6.1L6	172.9@2200	88.5	64.8	553.2@1450	108.5	52.4	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U
KDZXL06.1059	CFVI129A	TCD6.1L6	172.9@2000	93.0	61.9	553.2@1450	108.5	52.4	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U
KDZXL06.1059	CFVI129B	TCD6.1L6	172.9@2100	90.7	63.4	553.2@1450	108.5	52.4	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U
KDZXL06.1059	CFVI120	TCD6.1L6	160.9@1800	94.5	56.6	549.5@1450	108.0	52.1	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U
KDZXL06.1059	CFVI105	TCD6.1L6	140.8@2000	76.5	50.9	464.7@1450	91.5	44.2	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U
KDZXL06,1059	C5V1129	TCD6.1L6	172.9@2200	88.5	64.8	553.2@1450	108.5	52.4	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U
KDZXL06.1059	C5VI129A	TCD6.1L6	172.9@2000	93.0	61.9	553.2@1450	108.5	52.4	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U
KDZXL06.1059	C5VI129B	TCD6.1L6	172.9@2100	90.7	63.4	553.2@1450	108.5	52.4	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U
KDZXL06.1059	C5VI129C	TCD6.1L6	160.9@1800	94.5	56.3	553@1450	108.0	52.1	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U
KDZXL06.1059	C5VI105	TCD6.1L6	140.8@2000	76.5	50.9	464.7@1450	91.5	44.2	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U
KDZXL06.1059	CFVI129C	TCD6.1L6	160.9@1800	94.5	56.3	553@1450	108.0	52.1	DDI,TC,CAC,ECM,EGR,DOC,CTOX,SCR-U